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A Plan for Calculating the Accuracy of School Classifications for the Long-Term Accountability Cycles of the Kentucky Commonwealth Accountability Testing System

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A PLAN FOR CALCULATING THE ACCURACY OF SCHOOL CLASSIFICATIONS FOR THE LONG-TERM ACCOUNTABILITY CYCLES OF THE KENTUCKY COMMONWEALTH ACCOUNTABILITY TESTING SYSTEM

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Introduction

Kentucky's Commonwealth Accountability Testing System (CATS) was implemented in 1999 as a modification of the Kentucky Instructional Results Information System (KIRIS). Beginning with KIRIS, public schools in Kentucky have been classified by their successes in educating students. Both the KIRIS and CATS systems have significant consequences tied to schools' classifications. The accuracies of these classifications for different levels (elementary, middle, and high schools) and varying sizes of schools were computed for the Interim Accountability Cycle that bridged KIRIS and CATS and were reported in Hoffman and Wise (2001). This report presents the method for analyzing the accuracy of the school classifications for the Long-term Accountability Cycles that are legislated to occur every two years beginning in 2002 and ending in 2014. Classification of schools for both the Interim Cycle and the upcoming Long-Term Cycles involves a comparison of each school's current Accountability Index to a target index created from that school's performance in a prior, baseline time period. Because of this computational similarity, the basic method for calculating school classification accuracy for the Long-term Accountability Cycle is the same as that for the Interim Cycle, with some modifications. Differences in the method are created by (1) the inclusion of CTBS/5 scores in the Long-term Accountability Model, (2) the method for determining end-of-cycle target index scores, (3) the need to create standard errors of measurement (SEMs) to cover school size more accurately, and (4) the need to cover configurations for schools other than the typical elementary, middle, and high school. This report will briefly review the important features of the Long-term Accountability system and describe the procedure that will be used to calculate school classification accuracy. The report will also present results for the first step in the process, which is the calculation of standard errors of measurement for the Long-term Accountability baseline years (1999 and 2000).

Assessments included in CATS Long-term Accountability Model

CATS includes nine assessments administered to selected grades such that all assessments are administered in a typical elementary school, a typical middle school, and a typical high school. Eight of these assessments are components of the Kentucky Core Content Test, with each of these assessments specifically prepared for Kentucky students to assess achievement as defined by the Kentucky Core Content Assessment and laid out by the Kentucky Core Content Test Blueprint (**http://www.kde.state.ky.us/oaa/valid/blueprint.asp**). These

eight assessments are augmented by a national norm-referenced test, the CTBS/5. Table 1 indicates the grades in which the assessments are administered. Kentucky Core Content Tests are indicated by subject.

Table 1
Assessments by Grade Level

Grade	Subject
12	On-demand writing prompt and writing portfolios
11	Mathematics, Science, Social Studies, and Arts & Humanities
10	Reading and Practical Living/Vocational Studies
9	CTBS
8	Mathematics, Social Studies, Arts & Humanities, and Practical Living/Vocational Studies
7	Reading and Science
6	CTBS
5	Mathematics, Social Studies, Arts & Humanities, and Practical Living/Vocational Studies
4	Reading and Science
3	CTBS

For each of the Kentucky Core Content Tests, students are classified into one of four achievement levels: Novice, Apprentice, Proficient, and Distinguished. For the four primary content disciplines (Reading, Mathematics, Science, and Social Studies), the lower two levels, Novice and Apprentice, are subdivided into thirds (low, middle, and high), resulting in eight achievement categories. Based on Kentucky statutes, points are awarded to these eight categories in the following array (from low Novice to Distinguished): 0, 13, 26, 40, 60, 80, 100, and 140. For the remaining content areas, including Arts & Humanities, Practical Living/Vocational Studies, Writing (including the on-demand writing prompt and writing portfolios), scores are limited to two levels of Novice (with 0 points for students who make no attempt to answer and 13 points for those who try) and one level each for Apprentice, Proficient, and Distinguished (at 60, 100, and 140 points, respectively). These point values are used to calculate schools' average student achievement in each content area.

CTBS/5 scores are included in school accountability by converting percentiles to a scale similar to that for the Kentucky Core Content Test. Specifically, student's quartiles (lowest to highest) are converted to scores of 0, 60, 100, and 140, and these scores used to compute schools' average CTBS/5 scores.

In addition to the Kentucky Core Content Tests and CTBS/5, schools also receive scores for a composite of non-academic factors such as attendance rate, retention rate, and dropout rate. The Non-academic data are generated by each school.

CATS Long-term Accountability Model

The CATS Long-term Accountability Cycle began with the school year of 1998-1999, the first year in which the newly revised Kentucky Core Content Test was administered.

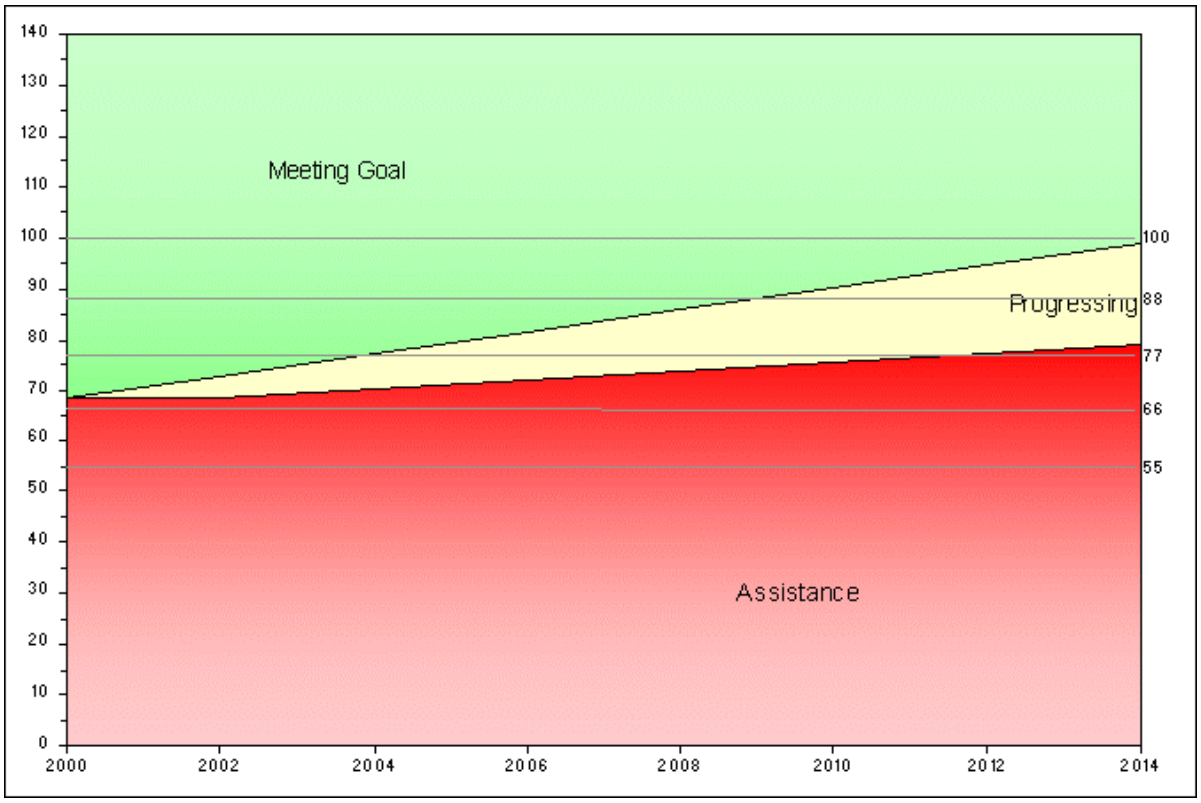

Figure 1. Representative School Growth Chart. (From a school at the KDE website http://www.kde.state.ky.us/oaa/implement/School_Report_Card/)

Because testing for CATS occurs in the spring of each school year, we will reference each year with the spring date only. Data from 1999 and 2000 constituted the "baseline" upon which targets scores for the period through 2014 have been set. For each school, a "goal line" is initially constructed on a school-year-by-academic-index plot, by drawing a line beginning at the point on the chart representing a school's Academic Index for the 2000-2001 baseline period and ending at the point on the chart which represents an Academic Index of 100 in the year 2014. The ending point is the statewide goal for all schools in 2014. In actuality, the line that is plotted incorporates an allowance for measurement error. That is, the beginning of the line is actually plotted at one standard error of measurement below the school's calculated Index and ends at one standard error of measurement below 100. The School Growth Chart in Figure 1 shows the goal line with the measurement error allowance. At the end of every two-year Accountability Cycle, the school's new Accountability Index is compared to the plotted line. If the new Index score is at or above the line, then the school is progressing at least at the targeted rate and is labeled "Meeting Goal."

The School Growth Chart (Figure 1) also shows two additional classifications "Progressing" and "Assistance." An additional line on the chart, called the Assistance Line, defines these two classifications. Conceptually, this line begins with the same Academic Index value as the initial goal line, is drawn horizontally over to the year 2002, and is then extended to

the point at the year 2014 representing an Accountability index of 80. Like the goal line, this line is actually created to include a one standard error allowance for measurement error.

For each line, the distinction between the lines plotted on the Chart with the built-in safety net and the initial lines without the safety net is important for later classification accuracy computations. Later in this report, we will refer to the "safety net" line and the "true" line to maintain this distinction.

School-Level Standard Errors of Measurement and Classification Accuracy Procedures

The foundation for the estimation of school classification accuracy is the estimation of standard errors of measurement (SEMs), or error variance, for schools' accountability cycle scores. That is,

- Error variance in the baseline index is calculated,
- Error variance in the end-of-cycle index is calculated,
- From these, error variance in the distance between the end-of-cycle index and the target index for that cycle is calculated.
- Using estimates of error variance in the distance and other distribution assumptions, probabilities of a school having a "true" index in a category other than the one assigned are calculated.

Because of the complexity of the Accountability Index and the fact that the system is applied to all schools in Kentucky, the analysis is also complicated by the following five considerations:

First, school index scores, for any cycle, are a weighted composite (weighted sum) of the various component scores. Therefore, the SEM for each index (baseline and end-of-cycle) can be computed from SEMs for each component used in the computation (i.e., the Kentucky Core Content Tests, CTBS/5, and the Non-academic indicators).[1] Because we are working with three types of SEMs, for clarity we will maintain a distinction between:

- "Assessment SEMs," e.g., SEM for Grade 4 Reading, Grade 10 Reading, Grade 9 CTBS/5, etc.
- "Accountability Index SEMs," i.e., for the Baseline Index and for each end-of-cycle index, and
- "Classification SEMs," which estimate the measurement error in the distance between an index and goal for the end of any particular Accountability Cycle.

[1] The general formula for calculating the variance of a weighted composite from the separate variances of the individual components of the composite is:

$Variance_{Composite} = \sum_{i=1}^{n} w_i^2 SEM_i^2 + 2\sum_{i=1}^{n}\sum_{j=1}^{n} r_{ij} w_i w_j SEM_i SEM_j$, where n is number of components. The SEMs can be decomposed into their true and error components. The basic form remains the same, however, since errors are assumed to be uncorrelated, second term components drop out with respect to error variance. This basic formula is applied throughout our calculations of classification accuracy.

Generalizability theory analyses elaborated after Yen (1997) and Miller (1999) are used to calculate Assessment SEMs for the all except the Non-academic indicators. The Generalizability analyses are identical to those used in calculating classification accuracy for the Interim Accountability Model. Two Generalizability models were used, including one for those Kentucky Core Content Tests that included different forms within any given year, and one for assessments for which all students were considered to have had the same form. Details of these analyses are presented in Hoffman and Wise (2000b and 2001) and are repeated in the Technical Appendix of this report.

We have no method for estimating the error variance for the Non-Academic scores. When computing classification accuracies for the Interim Accountability Model (Hoffman and Wise, 2001), we explored using the SEM values based on an assumed reliability of 1 (perfect reliability) and values based on an assumed reliability of 0 (total unreliability). We found that the estimate of overall school error was only slightly different for these two extreme assumptions. We therefore selected a conservative reliability estimate (.7) for the Non-Academic scores to use in calculations of school classification accuracy.

The second complicating factor arises because measurement error is affected by the amount of data available for a particular school: The more data, the less error. As a result of this principle, we expect large schools to be measured more accurately than small schools because their index scores were based on more students. Therefore, analyses of Assessment SEMs are conducted on three representative sizes of school, selecting schools to represent the lower third in size, the middle third, and the upper third.

These two considerations mean that for any given cycle there are 81 Assessment SEMs estimated by 81 Generalizability analyses: the eight content areas listed in Table 1 plus CTBS/5 times three grade levels times three representative school sizes.

A third complicating consideration is the fact that not all schools fit the typical elementary, middle, and high school model. In fact, Baseline Accountability SEMs were to be calculated for schools with 14 different configurations of grades. (The exact combinations are presented later in Table A-5 in the Appendix.) Fortunately, Accountability SEMs are computed from the separate grade/subject Assessment SEM. Therefore, calculating Accountability SEMs for schools with any particular grade configuration means including Assessment SEMs for the assessments administered in the grades included in that configuration.

A fourth consideration is the requirement to interpolate school sizes. In order to increase the precision of Accountability SEM estimates for schools not exactly at the representative sizes, an interpolation procedure is applied to generate Accountability SEM estimates for schools with 10 to 500 students per grade.

Finally, because schools will be classified according how their end-of-cycle Accountability Index falls in relation to their Goal Line and Assistance Line values for that cycle, measurement error in the baseline and the end-of-cycle value must be jointly considered. Computing classification accuracy involves consideration of the distance or differences between a school's actual end-of cycle index and the values specified by that school's true goal and assistance lines, i.e., when the lines are unadjusted for measurement error. Carefully notice that

schools will actually be classified according to where their Accountability Index falls in relation to the goal and assistance lines as plotted to include allowance for measurement error. For purposes of determining classification accuracy, however, schools' end-of-cycle Accountability Index must be compared to goal and assistance lines that are not adjusted for the potential error. In a sense, the classification accuracy analysis will determine the extent to which the error allowance is protecting schools from inappropriately low classifications.

Assessment SEM Computations and Results for the Long-Term Accountability Model Baseline

We will elaborate on the details of SEM calculations by presenting the results for the Long-term Accountability baseline, years 1999 and 2000. Note that while Assessment SEMs for these years were calculated for the Interim Accountability model, new performance level standard were set for the Kentucky Core Content Tests subsequent to those calculations. After the standard were reset, new performance levels were assigned to students for those years, based on their Kentucky Core Content Test scale scores. Therefore, Assessment SEMs needed to be recalculated for the Long-term Accountability model using the reassigned performance standards.

Identify Target School Sizes

The number of students within a school will affect the reliability of school-level scores; therefore, we begin our Assessment SEM computations on three representative school sizes. Because schools also differ in the number of grades they contain, and because the analysis begins with grade-level data, we defined school size by the average number of students in a grade. Three sizes of schools were targeted at the elementary, middle, and high school levels. Small schools were identified as those in the smallest 1/3rd of all schools, and the representative size was set at the median of that third, which is also the 16.7th percentile of all schools. Similarly, medium size schools were those in the middle 1/3rd and were represented by the 50th percentile of all schools. Finally, large schools were the largest 1/3rd and were represented by the 83.3rd percentile of all schools.

The selection of representative school sizes was slightly complicated by needing to analyze data from different grades for two different years. That is, either the grade level size for 1999 or 2000, or an average, could define school percentiles. In fact, this wrinkle was superceded by a larger concern. The Kentucky Core Content Test is divided into multiple forms and we needed each of the different test forms to be represented equally in our analyses. Therefore, target sizes had to be adjusted to the nearest multiple of 12, which is the number of Arts & Humanities and Practical Living/Vocational Studies forms. By using 12 as the multiple, we also accommodated the 6 forms for the remaining subject areas.

Table 2 below shows the distribution of school sizes by grade and year, as computed for the Kentucky Core Content Test during analyses of Interim Accountability classification accuracy. For reference, school sizes at the medians and the boundaries of the 1/3rd size divisions are indicated, along with the maximum size school. Although there are 14 grade configurations for which Accountability SEMs are calculated, schools with Grade 4 always include Grade 5, schools with Grade 7 always include Grade 8, and Grades 10, 11, and 12 are

always combined. Therefore, school size targets were set for Grade 4 and 5, Grade 7 and 8, and High School for the Kentucky Core Content Test. High School targets were set using only population data for Grade 10 and 11. These targets were determined for the final years of the Interim Accountability analysis and since they apply to the same year as the baseline years for Long-term Accountability, they remain the same. We expect to use these same school size targets when calculating Assessment SEMs for the end-of-cycle since (1) school populations are not expected to shift sufficiently within the need to target a multiple of 12, and (2) an interpolation procedure is applied to cover the range of school sizes.

Table 2
Identification of Representative School Sizes for Kentucky Core Content Tests

		School Sizes by Percentile					
Grade	Year	16.7th	33.3rd	50th	66.7th	88.3rd	Maximun
4	1999	30	45	59	75	96	246
4	2000	29	47	61	76	96	255
5	1999	28	44	57	73	89	290
5	2000	30	46	59	75	94	291
	Grade 4/5 targets	**24**		**60**		**180**	
7	1999	35	70	126	191	246	438
7	2000	36	67	127	190	259	459
8	1999	36	71	133	191	256	430
8	2000	36	70	126	194	247	423
	Grade 7/8 targets	**36**		**120**		**240**	
10	1999	61	115	179	228	298	624
10	2000	63	119	173	222	292	644
11	1999	65	110	164	202	258	563
11	2000	65	110	163	206	261	518
	High School target	**60**		**168**		**240**	

Table 3 presents targets for CTBS/5 grades derived the same way as described above.

Table 3
Identification of Representative School Sizes for CTBS/5

		School Sizes by Percentile					
Grade	Year	16.7^{th}	33.3rd	50th	66.7th	88.3rd	Maximun
3	1999	31	47	63	79	105	275
3	2000	31	46	62	80	106	254
	Grade 3 targets	**24**		**60**		**96**	
6	1999	25	40	59	98	222	449
6	2000	25	40	59	101	228	383
	Grade 6 targets	**24**		**60**		**180**	
9	1999	33	103	173	244	356	643
9	2000	61	113	194	249	365	590
	Grade 9 targets	**60**		**168**		**240**	

Select eligible schools and create school files by randomly selecting students within each school to meet targeted numbers.

Given that there are not schools with exactly these target numbers of students and with an exactly equal representation of subject forms, the next step was to create synthetic schools with exactly the target representation. This was done by randomly selecting/eliminating students from existing schools. However before this random selection of students could begin, candidate schools had to be identified. Because small, medium, and large size schools have characteristics other than size that may affect measurement accuracy (e.g., smaller schools may be more homogeneous), only schools near the target size were considered eligible for the analyses. Certainly, schools could be no smaller than the target size. Selection of the maximum size eligible to be included in the analysis became a trial and error process. We discovered that the criteria for having equal numbers of forms led to the need to consider larger schools for the maximum size than we originally expected. Table 4 indicates the ranges of school sizes, from target to maximum, that became candidates for our analyses, as well as the numbers of these schools. In each case, we tried to balance having enough schools for stable Generalizability results without having the maximum size being subjectively larger than the target size. This was most difficult to achieve for the small size middle and high schools.

Table 4
Ranges of candidate school sizes and numbers of schools in those ranges

Level	Small			Medium			Large		
	Target Size	Max. Size	No. of Schools	Target Size	Max. Size	No. of Schools	Target Size	Max. Size	No. of Schools
Grade 3	24	36	49	60	72	66	96	120	66
Grade 4	24	36	53	60	78	80	96	120	52
Grade 5	24	36	50	60	78	81	96	120	42
Grade 6	24	36	41	60	84	42	180	240	36
Grade 7	36	60	34	120	170	26	240	360	47
Grade 8	36	60	29	120	170	31	240	360	51
Grade 9	60	120	36	168	240	36	240	643	46
Grade 10	60	120	33	168	240	43	240	643	69
Grade 11	60	120	44	168	240	41	240	643	48
Grade 12	60	120	42	168	240	49	240	643	36

Estimate Assessment SEMs using Generalizability Theory analyses for each grade-subject by school-size combination for combined 1999 and 2000 student data.

After creating synthesized schools at the target student populations, Assessment SEMs were calculated using the Generalizability models specified by Hoffman and Wise (2000b, 2001) and repeated in the Appendix. The results of these analyses are presented in Table A-4 of the Appendix. The Assessment SEMs required for computation of Accountability Index SEMs are the square roots of the Generalizability Theory absolute error variance estimates provided in the appendix. Table A-4 also provides other Generalizability results as well, including relative error variance, total variance, plus absolute and relative Generalizability coefficients. The Generalizability coefficients estimate the reliabilities of the school mean test scores for each assessment included in CATS. In general, these reliabilities are in the mid-eighties to mid-nineties, and higher for the larger schools than the smaller schools. Later we will also use the total variance estimates.

To estimate error variance for the Non-academic component of the Accountability Index, total variance across schools (separately for elementary, middle, and high schools) was calculated and multiplied by 1 minus our assumed reliability of .7. The square root of that result yielded our estimate of Non-academic SEM. The same Non-academic SEM is used for all school sizes, because normal measurement theory may not apply. That is, large school may have a more difficult time getting accurate data about each of their students than small schools which may counteract the general measurement principle that more data decreases measurement error.

Interpolate Assessment SEMs for School Sizes 10 to 500

In the above step Assessment SEMs for representative school sizes were produced. In order to increase the precision of the SEMs for schools with student populations at other than the representative sizes, an interpolation procedure was used for each grade/assessment combination. This is an additional procedure implemented for the Long-term Accountability computations that was not used during estimation of Interim Accountability classification accuracy. This interpolation procedure estimated SEMs for possible school sizes between 10 and 500 by weighting the distance between any given school size and the representative sizes. More specifically, for each assessment the procedure began with the Generalizability absolute error estimates for the three representative school sizes (small, medium, and large), then

- For each grade level (g), assessment (a), and representative size (r, where r is small, medium, or large), compute within-school, student-level, error standard deviation (SESD) from absolute error (AERR), number of forms for the assessment (NF), and representative size (NP):
  - $SESD_{gar} = \sqrt{AERR_{gar} \times NF_{gar} \times NP_{gar}}$
- Interpolate within-school error standard deviations for alternate school sizes (or $SESD_{gan}$, where *n* stands for an alternate size), where *s*, *m*, and *l* refer to small, medium, and large representative sizes, respectively:
  - If $n \le NP_s$, let $SESD_{gan} = SESD_{gas}$
  - If $NP_s < n < NP_m$, let
    $$SESD_{gan} = \left(\left(n - NP_s \right) \times SESD_{gam} + \left(NP_m - n \right) \times SESD_{gas} \right) \div \left(NP_m - NP_s \right)$$
  - If $NP_m \le n < NP_l$, let
    $$SESD_{gan} = \left(\left(n - NP_m \right) \times SESD_{gal} + \left(NP_l - n \right) \times SESD_{gam} \right) \div \left(NP_l - NP_m \right)$$
  - If $n \ge NP_l$, let $SESD_{gan} = SESD_{gal}$
- Let $AssessmentSEM_{gan} = SESD_{gan} \div \sqrt{n}$.

The results of these interpolations was an array of 491 SEMs for each of the 27 grade/subject assessments, including on-demand writing, writing portfolio, and CTBS/5.

Estimate Accountability SEMs

A school's Accountability Index for the baseline years or for the end points of any of the Long-term cycles is a two-year weighted average of the assessment scores available for the grades contained within the school. Consequently, standard error of measurement in the Accountability index can also be computed by appropriately weighting Assessment SEMs. Table A-5 in the Technical Appendix presents the weights that are applied for calculation of both Accountability Index scores and Accountability SEMs. Formulas for calculating the variance of composites require intercorrelations among the components in the composite. Since we are combining error variances, the intercorrelations are assumed to be zero and terms involving these intercorrelations drop out of the formula. The resulting formula is:

$AccountabilitySEM_{sc} = \sqrt{\sum w_{ac}^2 \; SEM_{as}^2}$, for any given combination of school size (*s*) and configuration (*c*), where the summation is over all assessments (*a*).

Note that, except for the K-to-12 configuration, some weights will be 0. The results yielded a school-configuration-by-school-size matrix of 6,784 Accountability SEMs. Given that the Accountability Indexes are calculated to one decimal, these SEMs are likewise rounded to one decimal and are presented in Table A-6 in the Appendix for the Baseline years.

Combining Data from the Baseline and End-of-Cycle Years Leading to Classification Accuracy

The above steps in the process have been completed for the Baseline years only and must be repeated for end-of-cycle years for the Long-term Accountability period (e.g., 2001-2002 for the first cycle, 2003-2004 for the second cycle, etc.). The remaining series of step requires combining Schools' Accountability score data (Baseline and end-of-cycle Indexes) with Baseline and end-of-cycle SEM data.

School classifications are based on differences between schools' actual end-of-cycle Accountability Indexes and targets that are projected from their Baseline Indexes (see Figure 1). Classification accuracy is the probability that a school's "true index" is in the same school category (Meeting Goal, Progressive, Assistance) as assigned by the school's actual, observed index. Recall, however, that school classifications are made with an error factor built in. That is, schools' goal lines are drawn with a one standard error "safety net." This safety net is not applicable to true scores. Therefore, if a school's observed index were above the "safety net" goal line, as drawn in the School Growth Charts, then classification accuracy would refer to the probability that the school's true index is above the true goal line. Similar, if a school's observed index were below the "safety net" assistance line as drawn in the School Growth Chart, then classification accuracy would refer to the probability that the school's true index is below the "true" assistance line.

Compute True Target Index and Associated Classification SEM

To make the accuracy determination, the next step in the overall process is to compute the true target index. Note, again, that the true target index is not shown on the School Growth Chart, and it is important for the next step to see the actual computation. Actually, there are two computations, one for the Goal line and one for the Assistance Line.

True Goal Index

The true goal index lies on the line connecting the baseline index in the year 2000 to the constant value of 100 in 2014. The slope of the line is:

$$Goalslope = (100 - BI) \div (2014 - 2000).$$

Therefore, the true target index at the end of any cycle, where cycles (*C*) begins with Cycle 1 in 2002 is:

$$TG_C = BI + 2C((100 - BI) \div 14) = BI(1 - (2C \div 14)) + (200 \div 14)C.$$

Classification accuracy for "Meeting Goal" versus the two lower categories is a function of error variance in the difference between TG_c and the End of Cycle Index (AI_c):

$ClassificationSEM_G = \sqrt{SEM_{AI}^2 + (1 - (2C \div 14))^2 \times SEM_{BI}^2}$, where references to school size and configuration for SEMs are assumed, but not shown, and the subscript *G* refers to errors of measurement around the Goal line.

Note that, in 2014 (the seventh cycle) the target for all schools will be set at 100 and the weight of the error term for that target reduces to 0. Error in the index goal decreases from its initial level in 2002 until it is 0 in 2014.

True Assistance Index

The Assistance Index for Cycle 1 ending in 2002 is simply the Baseline Index, therefore the Classification SEMs can be estimated as:

$ClassificationSEM_A = \sqrt{SEM_{AI}^2 + SEM_{BI}^2}$, where reference to school size and configuration for SEMs are assumed, but not shown, and the subscript *A* refers to errors measurement associated with application of the Assistance line.

For cycles 2 through 7, the true assistance line begins at the value of the Baseline index plotted at 2002 and ends at 80 in 2014. The slope of this line is:

$$Asstslope = (80 - BI) \div (2014 - 2002).$$

Therefore, the true assistance target at the end of any cycle, where cycles (*C*) begin with Cycle 2 in 2004 is:

$$TA_C = BI + 2(C - 1)((80 - BI) \div 12) = BI(1 - (2(C - 1) \div 12)) + (160 \div 12)(C - 1).$$

Classification accuracy for "Assistance" versus the upper lower categories is a function of error variance in the difference between TA_c and the End of Cycle Index (AI_c):

$ClassificationSEM_A = \sqrt{SEM^2_{AI} + (1-(2(C-1)\div 12))^2 \times SEM^2_{BI}}$, where references to school size and configuration for SEMs are assumed, but not shown, and the subscript *A* refers to errors of measurement associated with application of the Assistance line.

Note that, in 2014 (the seventh cycle) the target for all schools will be set at 80 and the weight of the error term for that target reduces to 0.

Estimation of True Index Variance

Our method for calculating classification accuracy uses an estimate of the distribution of true scores around an observed score. Standard errors of measurement are an estimate of the opposite, i.e., the distribution of observed scores around true scores. Since true score variance is less than observed score variance, we can expect that true score variance conditioned on observed scores will be less than observed score variance conditioned on true scores. In our previous analyses of student classification accuracy (Hoffman and Wise, 2000a) and our analyses of Interim Accountability School classification accuracy (Hoffman and Wise, 2001), we applied Bayes' Theorem and estimates of true score distributions to transform SEMs into estimates of the distribution of true scores around varying levels of observed scores. For our analysis of Interim Accountability classification accuracy, we worked in the classification-difference score metric and created estimates of true score distributions of this difference. These true score distribution estimates were built for three types of school at each of the three representative sizes in a multi-step process as follows:

1. The process began by retrieving the total variance estimate from our Generalizability analyses.
2. The next step was to calculate intercorrelations among the assessments.
3. In the third step, we computed expected total variance in the Accountability Index using the total variances for each assessment and the intercorrelations among those assessments. The computations used the basic formula for calculation variances of composite scores based on variance of the components of the composite.
4. Having already calculated error variance in the Accountability Index (see above), the fourth step was to subtract Accountability error variance from Accountability total variance giving an estimate of the true variance in Accountability Index scores.
5. True and error variance estimates were also estimated for the initial years of the Interim Accountability cycle.[2]
6. By using the correlation between Baseline and end-of-cycle Accountability Indexes along with true and error variance estimate, we calculated true and error variance for the difference.
7. Finally, from these estimates of true and error variance for the difference, we applied our Bayesian procedure, producing a matrix of probabilities for varying possible true differences given possible observed differences. By partitioning the matrix according to the Interim Cycle classification rule, we produced 3 by 3 summary matrices (one for each type and representative size school) which indicated the expected proportions of true classification being the same or different t than the observed classifications.

[2] Due to testing format differences, some simplifying assumptions were used to estimate true and error variance for the Accountability Indexes for the initial years of the Interim Cycle.

For the Long-term model, we will apply these same steps to data from both the Baseline years and the end-of-cycle years. However, we must also augment that in several ways to accommodate differences between the Interim Accountability model and the Long-term Accountability model.

First, we will insert a new step between 1 and 2 above. The Generalizability analyses will produce variance estimates (total and error) at three representative sizes. For the Long-term model, we will apply the interpolation routine described above in order to estimate expected total variance and error variance, by grade, for each assessment component variance for school sizes from 10 to 500. The remaining steps, therefore, are applied to all school size values from 10 to 500. In addition, Step 3 will be expanded to include all 14 school configurations, not just the three representative configurations examined by our Interim Accountability analyses.

With 14 school configurations, Step 2 requires computation of more intercorrelations than the Interim Model. In fact, because one of the configurations includes Grade K to 12, Step 2 requires correlations among assessments across all grades. We will calculate these correlations using data for all schools in one large data set with pair-wise deletion of missing data. One complete correlation matrix with all grades for all assessments will be produced. Certainly, some of these correlations will be estimated with more data than others, and the sample sizes for the correlations between grade 4 assessments and Grade 12 assessments will be based on very small sample sizes. Certainly, this is less than optimal, but the alternatives are (1) to attempt to more directly calculate total Accountability Index variance, or (2) abandon the estimation of total variance by configuration and school size. With the first alternative, we are faced with a space defined by 14 configurations times 491 potential school sizes. Many of the resulting 6,874 cells will not the represented by any school, and the rest of the cells will have very few members. Furthermore, we have no solid theoretical grounds for merging sizes or configuration in order to create a sample sizes large enough to directly calculate total variance. As for the second option, we would only be able to calculate the distribution of expected observed scores given any particular true score. As a result, we could still examine overall system error with this measure, but the information would be less satisfying for individual schools. Clearly, we are faced with a trade-off in the quality of the information we can calculate. As time permits during implementations of these procedures, we will compare the process of synthesizing total Accountability Index variance from assessment total variance and intercorrelations among the assessments versus more directly computing total accountability variance by various grouping for schools by size and configuration.

Given a method for estimating of true and error variance in the Accountability Index, we can then produce matrices that indicate the likelihood of various true scores of given observed scores for any given school configuration and size. We could actually produce such matrices for all 6874 configuration-by-school size combinations. Since there are many fewer schools, our plan is to produce a matrix for each school based on its configuration and size. Actually, two matrices will be produced: one associated with the difference between observed and true values associated with the goal line and one associated with the difference between observed and true values for classifications involving the assistance line. By combining probabilities from these two matrices, for every school we will estimate probabilities that the school's true score could be in the Meeting Goal, Progressing, or Assistance Category. Across all schools, we can compute a three by three matrix indicating for schools assigned as Meeting Goal, Progressing, or Assistance

the probability that their true classifications could be Meeting Goal, Progressing, or Assistance. The diagonal of this matrix provides an overall estimate of classification accuracy across all school.

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Appendix
Technical Documentations

Generalizability Models

Standard errors of measure of the various components of the accountability model are estimated by Generalizability analyses of students' NAPD scores. Given that school index scores span two years, the basic model is one in which pupils are nested within form, years, and schools, and forms within years are crossed with schools. For writing and for CTBS/5 forms are not a consideration, so the Generalizability model is reduced to one in which pupils are nested within schools and years.

Figure A-1 presents the four-facet design for the Kentucky Core Content Tests. Tables A-1, 2 and 3 presents the calculations using Brennan's (1981) notation and algorithms for generating sums of squares and variance components. For each of the grade/subject combinations, the six sources of variance in schools' two-year academic index averages include: (1) school, (2) year, (3) school by year, (4) form within year, (5) school by form within year, and (6) pupil within form within school by form. The order of the nesting terms in the last source of variance is a little ambiguous in its wording since pupils are nested within forms, within schools, and within years. However, for derivation of the error components, the expressed order of the nested does not matter, as long as the nesting is captured.

Random, fixed, or sampled from a finite universe

Generalizability theory explicitly considers the universe to which observed score are interpretable. Typically, the items that make up a particular test are only viewed as samples of an infinite array of similar items. Being sampled from an infinite domain, items are therefore considered "random." On the other hand, some facets may cover the intended universe to which scores are intended to generalize. Year, for example, could be considered fixed because the universe of generalization is two years and both years are sampled. On the other hand, year could be considered as sampled from a finite universe. The logic is this: The school academic index, while directly interpretable as the average of students' achievement, is being used to make inferences about the instructional programs of those schools. An accountability cycle is four years long. Changes in instruction that occur in any of those four years could impact students' achievement in the final two years. Thus, the universe of generalization could be viewed as instructional change that occurred in any of the four years of the cycle. Only two of the four years are assessed, however. Other than being illustrative of sampling within a fixed domain, we are making no strong argument that the present data be treated with years being samples of a fixed four-year domain. Instead, we are suggesting that school and years be considered fixed. Forms and pupils are assumed to be randomly sampled from a infinite domain. Table 4 indicates that the value of for two sources of variance (year and school x year) reduce to zero when years are considered fixed.

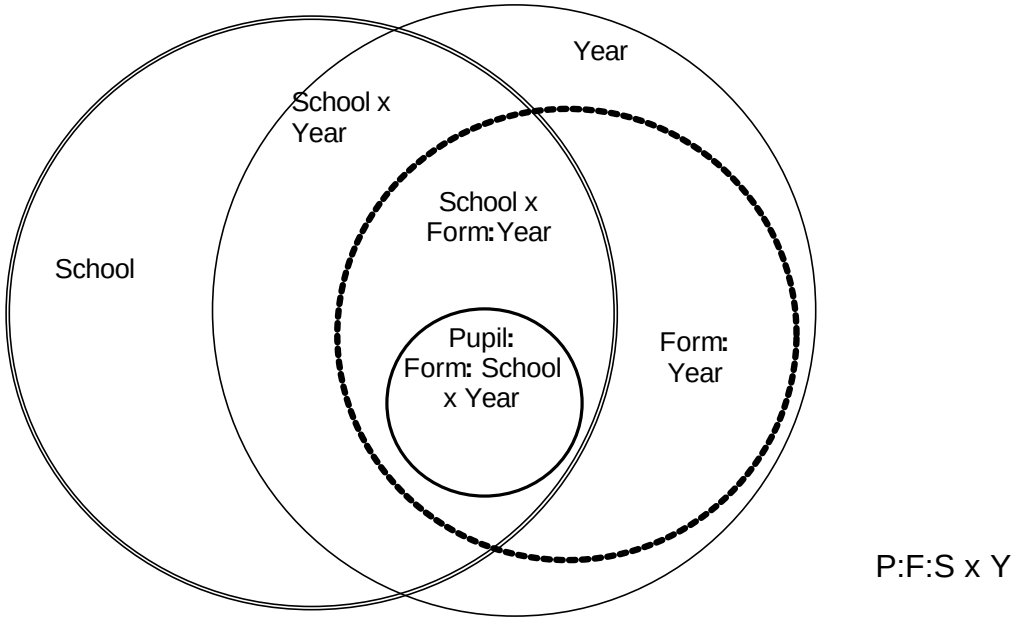

Figure A-1. Generalizability theory design representing Kentucky Core Content Test two-year accountability cycle.

Table A-1
Estimating Variance Components for Pupil: School Year Form Generalizability Theory Design – Random Effects Estimates

Effect	df	Means	SS
School (s)	$n_s - 1$	$\bar{X}_s = \frac{1}{n_y n_f n_p} \sum_y \sum_f \sum_p X_{syfp}$	$n_f\, n_y\, n_p\, \Sigma\, \bar{X}^2_s - n_s\, n_y\, n_f\, n_p\, \bar{X}^2$
Year (y)	$n_y - 1$	$\bar{X}_y = \frac{1}{n_s n_f n_p} \sum_s \sum_f \sum_p X_{syfp}$	$n_s\, n_f\, n_p\, \Sigma\, \bar{X}^2_y - n_s\, n_y\, n_f\, n_p\, \bar{X}^2$
School x Year	$(n_s - 1)(n_y - 1)$	$\bar{X}_{sy} = \frac{1}{n_f n_p} \sum_f \sum_p X_{syfp}$	$n_f\, n_p\, \Sigma\Sigma\, \bar{X}^2_{sy} - n_f\, n_y\, n_p\, \Sigma\, \bar{X}^2_s - n_s\, n_f\, n_p\, \Sigma\, \bar{X}^2_y + n_s\, n_y\, n_f\, n_p\, \bar{X}^2$
Form**:**Year (f:y)	$n_y(n_f - 1)$	$\bar{X}_{f:y} = \frac{1}{n_s n_p} \sum_s \sum_p X_{syfp}$	$n_s\, n_p\, \Sigma\Sigma\, \bar{X}^2_{yf} - n_s\, n_f\, n_p\, \Sigma\, \bar{X}^2_y$
School x Form : Year (sf:y)	$n_y(n_s - 1)(n_f - 1)$	$\bar{X}_{sf:y} = \frac{1}{n_p} \sum_p X_{syfp}$	$n_p\, \Sigma\Sigma\Sigma\, \bar{X}^2_{syf} - n_f\, n_p\, \Sigma\Sigma\, \bar{X}^2_{sy} - n_s\, n_p\, \Sigma\Sigma\, \bar{X}^2_{yf} + n_s\, n_f\, n_p\, \bar{X}^2_y$
Pupil: School Year Form (p:sfy)	$n_y n_s\, n_f\, (n_p - 1)$	na	$\Sigma\Sigma\Sigma\Sigma\, X^2_{psyf} - n_p\, \Sigma\Sigma\Sigma\, \bar{X}^2_{syf}$
Total	$n_s\, n_y\, n_f\, n_p - 1$	$\bar{X} = \frac{1}{n_s n_y n_f n_p} \sum_s \sum_y \sum_f \sum_p X_{syfp}$	$\Sigma\Sigma\Sigma\Sigma\, X^2_{psyf} - n_s\, n_y\, n_f\, n_p\, \bar{X}^2$

Table A-2
Estimating Variance Components for Pupil: School Year Form Generalizability Theory Design – G-Study Estimates

Effect (α)	Estimated σ^2 –Random Effects Model	Estimated $\sigma^2(\alpha\|M)$ -- Mixed Models (N = Universe size)	
		Basic Mixed Model	Year Fixed
School (s)	$\frac{[MS(s) - MS(sy)]}{n_y n_f n_p}$	$\hat{\sigma}^2_s + \frac{\hat{\sigma}^2_{sy}}{N_y} + \frac{\hat{\sigma}^2_{sf:y}}{N_f N_y} + \frac{\hat{\sigma}^2_{p:f:sy}}{N_f N_y N_p}$	$\hat{\sigma}^2_s + \frac{\hat{\sigma}^2_{sy}}{N_y}$
Year (y)	$\frac{[MS(y) - MS(sy) - MS(fy) + MS(sfy)]}{n_s n_f n_p}$	$\hat{\sigma}^2_y + \frac{\hat{\sigma}^2_{sy}}{N_s} + \frac{\hat{\sigma}^2_{f:y}}{N_f} + \frac{\hat{\sigma}^2_{sf:y}}{N_s N_f} + \frac{\hat{\sigma}^2_{p:f:sy}}{N_s N_f N_p}$	$\hat{\sigma}^2_y$
School x Year	$\frac{[MS(sy) - MS(sfy)]}{n_f n_p}$	$\hat{\sigma}^2_{sy} + \frac{\hat{\sigma}^2_{sf:y}}{N_f} + \frac{\hat{\sigma}^2_{p:f:sy}}{N_f N_p}$	$\hat{\sigma}^2_{sy}$
Form**:**Year (f:y)	$\frac{[MS(fy) - MS(sfy)]}{n_s n_p}$	$\hat{\sigma}^2_{f:y} + \frac{\hat{\sigma}^2_{sf:y}}{N_s} + \frac{\hat{\sigma}^2_{p:f:sy}}{N_s N_p}$	$\hat{\sigma}^2_{f:y}$
School x Form : Year (sf:y)	$\frac{[MS(sfy) - MS(syfp)]}{n_p}$	$\hat{\sigma}^2_{f:sy} + \frac{\hat{\sigma}^2_{p:f:sy}}{N_p}$	$\hat{\sigma}^2_{f:sy}$
Pupil: School Year Form (p:sfy)	MS(syfp)	$\hat{\sigma}^2_{p:f:sy}$	$\hat{\sigma}^2_{p:f:sy}$

Table A-3
Estimating Variance Components for Pupil: School Year Form Generalizability Theory Design – D-study Estimates

Effect (α)	D-study error component	Use term in	
		Absolute error estimate	Relative error estimate
School (s)	$\hat{\sigma}^2_s + \frac{\hat{\sigma}^2_{sy}}{N_y}$		
Year (y)	$[\hat{\sigma}^2_y / N_y] \; [1 - \frac{n_y}{N_y}] = \mathbf{0}$	(X)	
School x Year	$[\hat{\sigma}^2_{sy} / N_y] \times [1 - \frac{n_y}{N_y}] = \mathbf{0}$	(X)	(X)
Form**:**Year (f:y)	$\hat{\sigma}^2_{f:y} / N_y N_f$	X	
School x Form : Year (sf:y)	$\hat{\sigma}^2_{f:sy} / N_y N_f$	X	X
Pupil: School Year Form (p:sfy)	$\hat{\sigma}^2_{p:f:sy} / N_y N_f n_p$	X	X

Note that current literature is mixed on whether pupils should be considered fixed, random, or sampled from a fixed domain (Cronbach, Linn, Brennan, & Haertel, 1997; Hambleton, Jaeger, Koretz, Linn, Millman, & Phillips, 1996; Yen, 1997). Persistent criticisms of Kentucky's accountability model that cohort-to-cohort variation in student proficiency is unfair (Hoffman, 1998) makes treating students as fixed unwise. Yen uses two different approaches, one for which students are random, and a second for which students are treated as samples of a finite domain with that domain being defined as the total school population from which the tested students are taken. Yen's second approach does not fit Kentucky's two year cycle very well, particularly since we know the transience among students is perceived to be a significant issue for some districts (Thacker, Koger, Hoffman, and Koger, 2000) and is indeed related to school scores (Medsker, 1998). Therefore, we have chosen to treat students as random, i.e., sampled from an infinite universe. (Note also that in Yen's second approach, she adds a term for measurement error at the person level. That term is mathematically eliminated when students are treated as random.)

Yen (1997) also discussed potential modification to the forms by schools interaction given that forms are intended to target slightly different content. She concludes that since there is no way to directly test differences in targets (forms and students are confounded), the straightforward approach, as presented in Tables 2 – 4, is more acceptable with a caveat that it may overestimate standard error.

Absolute and relative error

Generalizability theory considers two kinds of error: absolute and relative. Absolute error is appropriate to consider when the objects of measure (schools in our case) are being assessed against a standard that generalizes beyond any of the particular instances of the various facets of measurement (e.g., different forms, different years, different pupils). Relative error, on the other hand, is appropriate when schools are being compared to each other and have been subject to the same measurement processes (same forms, same years). Table 4 indicates which variance component enter each type of error estimate. With years treated as fixed, three error components (form within year, school by form within year, and pupil within form within school by form) are summed to estimate absolute error. Only the later two components (school by form within year, and pupil within form within school by form) are summed to estimate error variance for the relative model. Because schools are being assessed against a standard, rather the by relative standing among other schools, absolute error is the appropriate estimate to use in computing CATS classification accuracy.

Special Considerations for Writing Assessments

Each student completes one on-demand writing prompt, and it is chosen by the student from a pair of alternatives. Six pairs of writing prompts constitute six forms for on-demand writing. From past analysis (Hoffman, Koger, & Awbrey,1997), we know that means for different writing prompts vary greatly for prompts within a form as well as for prompts from different forms. The variation in means leads to the conclusion that each prompt should be treated as a separate "form" using the same Generalizability analysis design described above. As far as the self-selection factor in concerned, we see no option other than considering it one of the random factors affecting prompt (i.e., item) sampling.

Portfolios, however, are (in theory[3]) unique to each individual student. "Forms" as a theoretical facet for portfolios is confounded with students.[4] Therefore, school-level error variance for portfolios will be assessed using a Generalizability design similar to the one presented above, but without form as a facet. That is, pupils are nested within the intersection of schools and years. Formulas for this three facet (pupils:schools x years) are available in Brennan (1981), designated as i:(p x h) in his notation.

CTBS/5

CTBS/5 scores also do not include separate forms at any one of the grade levels in which it is administered. Therefore the same Generalizability model applied to writing portfolios is applied to CTBS/5 scores.

Component Generalizabilty Results

Application of the above models yields the following results for the Long-term Accountability Base Line Years.

Table A-4
Variance Components for Each Grade/Subject By School size Configuration

rd = Reading sc = Science wo = Writing Prompt wp = Writing Portfolio ah = Arts & Humanities ma = Mathematics pl = PL/VS ss = Social Studies		Lg = Large School Md = Medium School Sm = Small School		NS = Number of Schools NP = Number of Pupils NF = Number of Forms NY = Number of Years			Ab, Err = Absolute Error Variance Rel. Error = Relative Error Variance Tot Var. = Total Variance		Ab. Gen. = Absolute Generalizability Rel. Gen. = Relative Generalizability		
Grade	Subject	School Size	NS	NP	N Y	NF	Absol. Err.	Rel. Err.	Total Var.	Absol. Gen.	Rel. Gen.
3	ct	lg	66	96	2	.	11.935	11.935	281.277	0.958	0.958
3	ct	md	35	60	2	.	18.568	18.568	406.480	0.954	0.954
3	ct	sm	49	24	2	.	48.407	48.407	275.457	0.824	0.824
4	rd	lg	36	16	2	6	6.208	5.995	101.721	0.939	0.941
4	rd	md	55	10	2	6	8.106	8.028	140.524	0.942	0.943
4	rd	sm	44	4	2	6	22.325	21.798	75.395	0.704	0.711
4	sc	lg	36	16	2	6	6.119	6.119	110.375	0.945	0.945
4	sc	md	55	10	2	6	7.821	7.821	182.917	0.957	0.957
4	sc	sm	44	4	2	6	18.186	17.839	108.250	0.832	0.835
4	wo	lg	35	16	2	6	5.651	5.512	44.072	0.872	0.875
4	wo	md	54	10	2	6	7.972	7.896	52.788	0.849	0.850
										Table continues	
4	wo	sm	42	4	2	6	15.894	15.867	47.132	0.663	0.663

[3] Some schools do tend to structure common activities and present selected topics for students to create portfolio entries.

[4] Again, this is an oversimplication. Anecdotally, some schools reportedly been doing a better job than others of structuring portfolio activities that facilitate higher quality writing. "Item sampling," therefore, may be confounded with schools. In this unusual case, schools become both the object of measurement and an instrument, or facet, of measurement.

Table A-4
Variance Components for Each Grade/Subject By School size Configuration

rd = Reading sc = Science wo = Writing Prompt wp = Writing Portfolio ah = Arts & Humanities ma = Mathematics pl = PL/VS ss = Social Studies		Lg = Large School Md = Medium School Sm = Small School		NS = Number of Schools NP = Number of Pupils NF = Number of Forms NY = Number of Years			Ab, Err = Absolute Error Variance Rel. Error = Relative Error Variance Tot Var. = Total Variance			Ab. Gen. = Absolute Generalizability Rel. Gen. = Relative Generalizability	
Grade	Subject	School Size	NS	NP	N Y	NF	Absol. Err.	Rel. Err.	Total Var.	Absol. Gen.	Rel. Gen.
4	wp	lg	54	96	2	.	4.048	4.048	147.104	0.972	0.972
4	wp	md	29	60	2	.	6.090	6.090	199.888	0.970	0.970
4	wp	sm	51	24	2	.	17.683	17.683	227.601	0.922	0.922
5	ah	lg	28	8	2	12	8.067	7.939	143.255	0.944	0.945
5	ah	md	39	5	2	12	10.796	10.459	119.436	0.910	0.912
5	ah	sm	28	2	2	12	22.270	22.175	85.604	0.740	0.741
5	ma	lg	33	16	2	6	7.364	7.186	200.391	0.963	0.964
5	ma	md	57	10	2	6	9.426	9.426	178.516	0.947	0.947
5	ma	sm	39	4	2	6	22.213	22.213	145.874	0.848	0.848
5	pl	lg	28	8	2	12	8.868	8.632	142.296	0.938	0.939
5	pl	md	38	5	2	12	12.913	12.737	131.288	0.902	0.903
5	pl	sm	28	2	2	12	31.440	31.440	156.133	0.799	0.799
5	ss	lg	32	16	2	6	8.144	8.144	229.568	0.965	0.965
5	ss	md	57	10	2	6	12.491	12.312	199.534	0.937	0.938
5	ss	sm	39	4	2	6	27.197	26.125	199.494	0.864	0.869
6	ct	lg	36	180	2	.	6.494	6.494	159.455	0.959	0.959
6	ct	md	42	60	2	.	18.344	18.344	335.471	0.945	0.945
6	ct	sm	41	24	2	.	49.311	49.311	181.653	0.729	0.729
7	rd	lg	41	40	2	6	2.293	2.205	122.577	0.981	0.982
7	rd	md	22	20	2	6	4.428	4.230	49.878	0.911	0.915
7	rd	sm	28	6	2	6	12.799	12.799	107.816	0.881	0.881
7	sc	lg	41	40	2	6	3.591	3.571	173.255	0.979	0.979
7	sc	md	22	20	2	6	7.215	7.215	80.072	0.910	0.910
7	sc	sm	28	6	2	6	15.238	14.478	187.607	0.919	0.923
7	wo	lg	41	40	2	6	2.510	2.260	64.101	0.961	0.965
7	wo	md	22	20	2	6	4.330	4.249	30.428	0.858	0.860
7	wo	sm	27	6	2	6	11.789	11.789	75.778	0.844	0.844
7	wp	lg	48	240	2	.	1.733	1.733	148.413	0.988	0.988
7	wp	md	27	120	2	.	3.700	3.700	69.190	0.947	0.947
7	wp	sm	36	36	2	.	12.672	12.672	120.415	0.895	0.895
8	ah	lg	29	20	2	12	3.241	3.208	126.937	0.974	0.975
8	ah	md	26	10	2	12	6.147	6.061	106.441	0.942	0.943
8	ah	sm	21	3	2	12	17.900	17.649	270.439	0.934	0.935
8	ma	lg	40	40	2	6	2.484	2.446	128.201	0.981	0.981
											Table continues
8	ma	md	27	20	2	6	4.868	4.781	79.019	0.938	0.939
8	ma	sm	26	6	2	6	13.543	13.543	345.025	0.961	0.961
8	pl	lg	30	20	2	12	3.398	3.356	108.562	0.969	0.969

Table A-4
Variance Components for Each Grade/Subject By School size Configuration

rd = Reading sc = Science wo = Writing Prompt wp = Writing Portfolio ah = Arts & Humanities ma = Mathematics pl = PL/VS ss = Social Studies		Lg = Large School Md = Medium School Sm = Small School		NS = Number of Schools NP = Number of Pupils NF = Number of Forms NY = Number of Years			Ab, Err = Absolute Error Variance Rel. Error = Relative Error Variance Tot Var. = Total Variance		Ab. Gen. = Absolute Generalizability Rel. Gen. = Relative Generalizability		
Grade	Subject	School Size	NS	NP	NY	NF	Absol. Err.	Rel. Err.	Total Var.	Absol. Gen.	Rel. Gen.
8	pl	md	26	10	2	12	7.395	7.356	104.654	0.929	0.930
8	pl	sm	20	3	2	12	22.297	22.297	257.481	0.913	0.913
8	ss	lg	41	40	2	6	3.185	3.185	108.854	0.971	0.971
8	ss	md	27	20	2	6	5.375	5.191	109.991	0.951	0.953
8	ss	sm	26	6	2	6	12.817	12.455	273.806	0.953	0.955
9	ct	lg	46	312	2	.	4.143	4.143	327.514	0.987	0.987
9	ct	md	36	168	2	.	7.733	7.733	236.606	0.967	0.967
9	ct	sm	36	24	2	.	53.091	53.091	305.827	0.826	0.826
10	pl	lg	47	20	2	12	3.276	3.190	106.937	0.969	0.970
10	pl	md	29	14	2	12	5.655	5.495	65.694	0.914	0.916
10	pl	sm	26	5	2	12	12.844	12.844	65.829	0.805	0.805
10	rd	lg	56	40	2	6	2.392	2.338	102.136	0.977	0.977
10	rd	md	39	28	2	6	3.839	3.748	61.919	0.938	0.939
10	rd	sm	29	10	2	6	8.099	8.099	65.020	0.875	0.875
11	ah	lg	35	20	2	12	3.443	3.365	161.583	0.979	0.979
11	ah	md	24	14	2	12	4.278	4.218	101.996	0.958	0.959
11	ah	sm	34	5	2	12	10.347	10.321	102.731	0.899	0.900
11	ma	lg	40	40	2	6	3.068	2.840	168.993	0.982	0.983
11	ma	md	27	28	2	6	3.814	3.750	172.664	0.978	0.978
11	ma	sm	38	10	2	6	9.492	9.249	102.219	0.907	0.910
11	sc	lg	40	40	2	6	2.923	2.754	96.554	0.970	0.971
11	sc	md	27	28	2	6	3.194	2.849	78.908	0.960	0.964
11	sc	sm	38	10	2	6	7.591	7.519	74.248	0.898	0.899
11	ss	lg	40	40	2	6	2.352	2.310	140.559	0.983	0.984
11	ss	md	27	28	2	6	2.871	2.753	99.381	0.971	0.972
11	ss	sm	38	10	2	6	7.874	7.874	75.181	0.895	0.895
12	wo	lg	29	40	2	6	1.673	1.606	21.860	0.923	0.927
12	wo	md	29	28	2	6	2.853	2.636	37.943	0.925	0.931
12	wo	sm	29	10	2	6	6.263	6.263	40.971	0.847	0.847
12	wp	lg	36	240	2	.	1.991	1.991	61.669	0.968	0.968
12	wp	md	50	168	2	.	3.002	3.002	82.675	0.964	0.964
12	wp	sm	42	60	2	.	7.959	7.959	92.523	0.914	0.914

Weights used in Calculating Accountability Index Score and Accountability Index SEMs

Table A-5 Weight used in Calculating Accountability Index Score and Accountability Index SEMs

Grade	Subject	WK_5	WK_6	WK_8	WK_12	W4_5	W4_6	W4_8	W6_8	W6_12	W7_8	W7_9	W7_12	W9_12	W10_12
03	ct	.050000	.025000	.025000	.016667										
04	rd	.190000	.190000	.095000	.063333	.200000	.190000	.100000							
04	sc	.142500	.142500	.071250	.047500	.150000	.142500	.075000							
04	wo	.028500	.028500	.014250	.009500	.030000	.028500	.015000							
04	wp	.114000	.114000	.057000	.038000	.120000	.114000	.060000							
05	ah	.047500	.047500	.023750	.015833	.050000	.047500	.025000							
05	ma	.190000	.190000	.095000	.063333	.200000	.190000	.100000							
05	na	.047500	.047500	.023750	.015833	.050000	.047500	.025000							
05	pl	.047500	.047500	.023750	.015833	.050000	.047500	.025000							
05	ss	.142500	.142500	.071250	.047500	.150000	.142500	.075000							
06	ct		.025000	.025000	.016667		.050000	.025000	.050000	.025000					
07	rd			.071250	.047500			.071250	.142500	.071250	.150000	.142500	.075000		
07	sc			.071250	.047500			.071250	.142500	.071250	.150000	.142500	.075000		
07	wo			.014250	.009500			.014250	.028500	.014250	.030000	.028500	.015000		
07	wp			.057000	.038000			.057000	.114000	.057000	.120000	.114000	.060000		
08	ah			.035625	.023750			.035625	.071250	.035625	.075000	.071250	.037500		
08	ma			.071250	.047500			.071250	.142500	.071250	.150000	.142500	.075000		
08	na			.047500	.031667			.047500	.095000	.047500	.100000	.095000	.050000		
08	pl			.035625	.023750			.035625	.071250	.035625	.075000	.071250	.037500		
08	ss			.071250	.047500			.071250	.142500	.071250	.150000	.142500	.075000		
09	ct				.016667					.025000		.050000	.025000	.050000	
10	pl				.023750					.035625			.035625	.071250	.075000
10	rd				.047500					.071250			.071250	.142500	.150000
11	ah				.023750					.035625			.035625	.071250	.075000
11	ma				.047500					.071250			.071250	.142500	.150000
11	sc				.047500					.071250			.071250	.142500	.150000
11	ss				.047500					.071250			.071250	.142500	.150000
12	na				.031667					.047500			.047500	.095000	.100000
12	wd				.009500					.014250			.014250	.028500	.030000
12	wo				.038000					.057000			.057000	.114000	.120000

Base Line Accountability Index SEMs

Table A–6
Base Line Accountabilty Index Standard Errors of Measurement by School Configuration and School Size (School Size is in terms of average number of student per grade = N)

N	School Configuration													
	K - 5	K - 6	K - 8	K - 12	4 - 5	4 - 6	4 - 8	6 - 8	6 - 12	7 - 8	7 - 9	7 - 12	9 - 12	12 - 12
10	2.7	2.7	1.8	1.5	2.8	2.7	1.9	2.5	1.7	2.5	2.5	1.7	2.4	2.5
11	2.6	2.6	1.8	1.4	2.7	2.6	1.8	2.4	1.7	2.4	2.4	1.7	2.3	2.4
12	2.6	2.5	1.7	1.4	2.7	2.6	1.8	2.3	1.6	2.4	2.3	1.6	2.2	2.3
13	2.5	2.5	1.7	1.3	2.6	2.5	1.7	2.2	1.5	2.3	2.2	1.6	2.1	2.2
14	2.4	2.4	1.6	1.3	2.5	2.4	1.7	2.2	1.5	2.2	2.2	1.5	2.1	2.1
15	2.4	2.4	1.6	1.3	2.5	2.4	1.6	2.1	1.5	2.2	2.1	1.5	2.0	2.1
16	2.3	2.3	1.6	1.2	2.4	2.3	1.6	2.0	1.4	2.1	2.0	1.4	1.9	2.0
17	2.3	2.2	1.5	1.2	2.3	2.3	1.5	2.0	1.4	2.1	2.0	1.4	1.9	1.9
18	2.2	2.2	1.5	1.2	2.3	2.2	1.5	2.0	1.3	2.0	2.0	1.4	1.8	1.9
19	2.1	2.1	1.4	1.1	2.2	2.1	1.5	1.9	1.3	2.0	1.9	1.3	1.8	1.8
20	2.1	2.1	1.4	1.1	2.2	2.1	1.4	1.9	1.3	1.9	1.9	1.3	1.8	1.8
21	2.0	2.0	1.4	1.1	2.1	2.0	1.4	1.8	1.3	1.9	1.8	1.3	1.7	1.8
22	2.0	2.0	1.3	1.1	2.1	2.0	1.4	1.8	1.2	1.9	1.8	1.3	1.7	1.7
23	1.9	1.9	1.3	1.0	2.0	1.9	1.3	1.8	1.2	1.8	1.8	1.2	1.7	1.7
24	1.9	1.9	1.3	1.0	2.0	1.9	1.3	1.7	1.2	1.8	1.7	1.2	1.6	1.7
25	1.9	1.9	1.3	1.0	1.9	1.9	1.3	1.7	1.2	1.7	1.7	1.2	1.6	1.6
26	1.8	1.8	1.2	1.0	1.9	1.8	1.3	1.7	1.1	1.7	1.7	1.2	1.6	1.6
27	1.8	1.8	1.2	1.0	1.9	1.8	1.2	1.6	1.1	1.7	1.6	1.1	1.5	1.6
28	1.8	1.8	1.2	0.9	1.8	1.8	1.2	1.6	1.1	1.7	1.6	1.1	1.5	1.6
29	1.7	1.7	1.2	0.9	1.8	1.7	1.2	1.6	1.1	1.6	1.6	1.1	1.5	1.5
30	1.7	1.7	1.2	0.9	1.8	1.7	1.2	1.6	1.1	1.6	1.6	1.1	1.5	1.5
31	1.7	1.7	1.1	0.9	1.7	1.7	1.2	1.5	1.1	1.6	1.5	1.1	1.5	1.5
32	1.7	1.6	1.1	0.9	1.7	1.7	1.1	1.5	1.0	1.6	1.5	1.1	1.4	1.5
33	1.6	1.6	1.1	0.9	1.7	1.6	1.1	1.5	1.0	1.5	1.5	1.0	1.4	1.5
34	1.6	1.6	1.1	0.9	1.7	1.6	1.1	1.5	1.0	1.5	1.5	1.0	1.4	1.5
35	1.6	1.6	1.1	0.9	1.6	1.6	1.1	1.4	1.0	1.5	1.4	1.0	1.4	1.4
36	1.6	1.5	1.1	0.8	1.6	1.6	1.1	1.4	1.0	1.5	1.4	1.0	1.4	1.4
37	1.5	1.5	1.0	0.8	1.6	1.5	1.1	1.4	1.0	1.5	1.4	1.0	1.4	1.4
38	1.5	1.5	1.0	0.8	1.6	1.5	1.0	1.4	1.0	1.4	1.4	1.0	1.4	1.4
39	1.5	1.5	1.0	0.8	1.5	1.5	1.0	1.4	1.0	1.4	1.4	1.0	1.3	1.4
40	1.5	1.5	1.0	0.8	1.5	1.5	1.0	1.4	1.0	1.4	1.4	1.0	1.3	1.4
41	1.5	1.4	1.0	0.8	1.5	1.5	1.0	1.3	0.9	1.4	1.3	1.0	1.3	1.4
42	1.4	1.4	1.0	0.8	1.5	1.4	1.0	1.3	0.9	1.4	1.3	0.9	1.3	1.3
43	1.4	1.4	1.0	0.8	1.5	1.4	1.0	1.3	0.9	1.4	1.3	0.9	1.3	1.3
44	1.4	1.4	1.0	0.8	1.5	1.4	1.0	1.3	0.9	1.3	1.3	0.9	1.3	1.3
45	1.4	1.4	0.9	0.8	1.4	1.4	1.0	1.3	0.9	1.3	1.3	0.9	1.3	1.3
46	1.4	1.4	0.9	0.7	1.4	1.4	1.0	1.3	0.9	1.3	1.3	0.9	1.2	1.3
47	1.4	1.3	0.9	0.7	1.4	1.4	0.9	1.3	0.9	1.3	1.3	0.9	1.2	1.3
48	1.3	1.3	0.9	0.7	1.4	1.3	0.9	1.2	0.9	1.3	1.2	0.9	1.2	1.3
49	1.3	1.3	0.9	0.7	1.4	1.3	0.9	1.2	0.9	1.3	1.2	0.9	1.2	1.2
50	1.3	1.3	0.9	0.7	1.4	1.3	0.9	1.2	0.9	1.3	1.2	0.9	1.2	1.2
51	1.3	1.3	0.9	0.7	1.4	1.3	0.9	1.2	0.8	1.2	1.2	0.9	1.2	1.2
52	1.3	1.3	0.9	0.7	1.3	1.3	0.9	1.2	0.8	1.2	1.2	0.8	1.2	1.2
53	1.3	1.3	0.9	0.7	1.3	1.3	0.9	1.2	0.8	1.2	1.2	0.8	1.2	1.2

Table A–6
Base Line Accountabilty Index Standard Errors of Measurement by School Configuration and School Size (School Size is in terms of average number of student per grade = N)

	School Configuration													
N	K - 5	K - 6	K - 8	K - 12	4 - 5	4 - 6	4 - 8	6 - 8	6 - 12	7 - 8	7 - 9	7 - 12	9 - 12	12 - 12
54	1.3	1.3	0.9	0.7	1.3	1.3	0.9	1.2	0.8	1.2	1.2	0.8	1.1	1.2
55	1.3	1.2	0.9	0.7	1.3	1.3	0.9	1.2	0.8	1.2	1.2	0.8	1.1	1.2
56	1.2	1.2	0.8	0.7	1.3	1.2	0.9	1.1	0.8	1.2	1.2	0.8	1.1	1.2
57	1.2	1.2	0.8	0.7	1.3	1.2	0.9	1.1	0.8	1.2	1.1	0.8	1.1	1.2
58	1.2	1.2	0.8	0.7	1.3	1.2	0.8	1.1	0.8	1.2	1.1	0.8	1.1	1.1
59	1.2	1.2	0.8	0.7	1.3	1.2	0.8	1.1	0.8	1.2	1.1	0.8	1.1	1.1
60	1.2	1.2	0.8	0.7	1.2	1.2	0.8	1.1	0.8	1.1	1.1	0.8	1.1	1.1
61	1.2	1.2	0.8	0.6	1.2	1.2	0.8	1.1	0.8	1.1	1.1	0.8	1.1	1.1
62	1.2	1.2	0.8	0.6	1.2	1.2	0.8	1.1	0.8	1.1	1.1	0.8	1.1	1.1
63	1.2	1.2	0.8	0.6	1.2	1.2	0.8	1.1	0.8	1.1	1.1	0.8	1.1	1.1
64	1.2	1.2	0.8	0.6	1.2	1.2	0.8	1.1	0.8	1.1	1.1	0.8	1.1	1.1
65	1.2	1.1	0.8	0.6	1.2	1.2	0.8	1.1	0.7	1.1	1.1	0.8	1.0	1.1
66	1.1	1.1	0.8	0.6	1.2	1.1	0.8	1.1	0.7	1.1	1.1	0.8	1.0	1.1
67	1.1	1.1	0.8	0.6	1.2	1.1	0.8	1.1	0.7	1.1	1.1	0.7	1.0	1.1
68	1.1	1.1	0.8	0.6	1.2	1.1	0.8	1.0	0.7	1.1	1.0	0.7	1.0	1.1
69	1.1	1.1	0.8	0.6	1.2	1.1	0.8	1.0	0.7	1.1	1.0	0.7	1.0	1.0
70	1.1	1.1	0.8	0.6	1.2	1.1	0.8	1.0	0.7	1.1	1.0	0.7	1.0	1.0
71	1.1	1.1	0.8	0.6	1.1	1.1	0.8	1.0	0.7	1.1	1.0	0.7	1.0	1.0
72	1.1	1.1	0.7	0.6	1.1	1.1	0.8	1.0	0.7	1.0	1.0	0.7	1.0	1.0
73	1.1	1.1	0.7	0.6	1.1	1.1	0.8	1.0	0.7	1.0	1.0	0.7	1.0	1.0
74	1.1	1.1	0.7	0.6	1.1	1.1	0.8	1.0	0.7	1.0	1.0	0.7	1.0	1.0
75	1.1	1.1	0.7	0.6	1.1	1.1	0.7	1.0	0.7	1.0	1.0	0.7	1.0	1.0
76	1.1	1.1	0.7	0.6	1.1	1.1	0.7	1.0	0.7	1.0	1.0	0.7	1.0	1.0
77	1.1	1.1	0.7	0.6	1.1	1.1	0.7	1.0	0.7	1.0	1.0	0.7	1.0	1.0
78	1.1	1.0	0.7	0.6	1.1	1.1	0.7	1.0	0.7	1.0	1.0	0.7	1.0	1.0
79	1.0	1.0	0.7	0.6	1.1	1.0	0.7	1.0	0.7	1.0	1.0	0.7	1.0	1.0
80	1.0	1.0	0.7	0.6	1.1	1.0	0.7	1.0	0.7	1.0	1.0	0.7	0.9	1.0
81	1.0	1.0	0.7	0.6	1.1	1.0	0.7	1.0	0.7	1.0	1.0	0.7	0.9	1.0
82	1.0	1.0	0.7	0.6	1.1	1.0	0.7	0.9	0.7	1.0	1.0	0.7	0.9	1.0
83	1.0	1.0	0.7	0.6	1.1	1.0	0.7	0.9	0.7	1.0	0.9	0.7	0.9	1.0
84	1.0	1.0	0.7	0.6	1.1	1.0	0.7	0.9	0.7	1.0	0.9	0.7	0.9	1.0
85	1.0	1.0	0.7	0.6	1.0	1.0	0.7	0.9	0.7	1.0	0.9	0.7	0.9	0.9
86	1.0	1.0	0.7	0.5	1.0	1.0	0.7	0.9	0.7	1.0	0.9	0.7	0.9	0.9
87	1.0	1.0	0.7	0.5	1.0	1.0	0.7	0.9	0.6	1.0	0.9	0.7	0.9	0.9
88	1.0	1.0	0.7	0.5	1.0	1.0	0.7	0.9	0.6	0.9	0.9	0.7	0.9	0.9
89	1.0	1.0	0.7	0.5	1.0	1.0	0.7	0.9	0.6	0.9	0.9	0.7	0.9	0.9
90	1.0	1.0	0.7	0.5	1.0	1.0	0.7	0.9	0.6	0.9	0.9	0.6	0.9	0.9
91	1.0	1.0	0.7	0.5	1.0	1.0	0.7	0.9	0.6	0.9	0.9	0.6	0.9	0.9
92	1.0	1.0	0.7	0.5	1.0	1.0	0.7	0.9	0.6	0.9	0.9	0.6	0.9	0.9
93	1.0	1.0	0.7	0.5	1.0	1.0	0.7	0.9	0.6	0.9	0.9	0.6	0.9	0.9
94	1.0	1.0	0.7	0.5	1.0	1.0	0.7	0.9	0.6	0.9	0.9	0.6	0.9	0.9
95	1.0	0.9	0.7	0.5	1.0	1.0	0.7	0.9	0.6	0.9	0.9	0.6	0.9	0.9
96	1.0	0.9	0.6	0.5	1.0	1.0	0.7	0.9	0.6	0.9	0.9	0.6	0.9	0.9
97	0.9	0.9	0.6	0.5	1.0	0.9	0.7	0.9	0.6	0.9	0.9	0.6	0.9	0.9
98	0.9	0.9	0.6	0.5	1.0	0.9	0.7	0.9	0.6	0.9	0.9	0.6	0.9	0.9
99	0.9	0.9	0.6	0.5	1.0	0.9	0.6	0.9	0.6	0.9	0.9	0.6	0.9	0.9

Table A–6
Base Line Accountabilty Index Standard Errors of Measurement by School Configuration and School Size (School Size is in terms of average number of student per grade = N)

	School Configuration													
N	K - 5	K - 6	K - 8	K - 12	4 - 5	4 - 6	4 - 8	6 - 8	6 - 12	7 - 8	7 - 9	7 - 12	9 - 12	12 - 12
100	0.9	0.9	0.6	0.5	1.0	0.9	0.6	0.9	0.6	0.9	0.9	0.6	0.8	0.9
101	0.9	0.9	0.6	0.5	1.0	0.9	0.6	0.9	0.6	0.9	0.9	0.6	0.8	0.9
102	0.9	0.9	0.6	0.5	1.0	0.9	0.6	0.9	0.6	0.9	0.9	0.6	0.8	0.9
103	0.9	0.9	0.6	0.5	1.0	0.9	0.6	0.8	0.6	0.9	0.9	0.6	0.8	0.9
104	0.9	0.9	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.9	0.8	0.6	0.8	0.9
105	0.9	0.9	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.9	0.8	0.6	0.8	0.9
106	0.9	0.9	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.9	0.8	0.6	0.8	0.8
107	0.9	0.9	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.9	0.8	0.6	0.8	0.8
108	0.9	0.9	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.9	0.8	0.6	0.8	0.8
109	0.9	0.9	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.9	0.8	0.6	0.8	0.8
110	0.9	0.9	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.8	0.8	0.6	0.8	0.8
111	0.9	0.9	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.8	0.8	0.6	0.8	0.8
112	0.9	0.9	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.8	0.8	0.6	0.8	0.8
113	0.9	0.9	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.8	0.8	0.6	0.8	0.8
114	0.9	0.9	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.8	0.8	0.6	0.8	0.8
115	0.9	0.9	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.8	0.8	0.6	0.8	0.8
116	0.9	0.9	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.8	0.8	0.6	0.8	0.8
117	0.9	0.9	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.8	0.8	0.6	0.8	0.8
118	0.9	0.9	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.8	0.8	0.6	0.8	0.8
119	0.9	0.8	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.8	0.8	0.6	0.8	0.8
120	0.9	0.8	0.6	0.5	0.9	0.9	0.6	0.8	0.6	0.8	0.8	0.6	0.8	0.8
121	0.8	0.8	0.6	0.5	0.9	0.8	0.6	0.8	0.6	0.8	0.8	0.6	0.8	0.8
122	0.8	0.8	0.6	0.5	0.9	0.8	0.6	0.8	0.5	0.8	0.8	0.6	0.8	0.8
123	0.8	0.8	0.6	0.5	0.9	0.8	0.6	0.8	0.5	0.8	0.8	0.6	0.8	0.8
124	0.8	0.8	0.6	0.5	0.9	0.8	0.6	0.8	0.5	0.8	0.8	0.6	0.8	0.8
125	0.8	0.8	0.6	0.5	0.9	0.8	0.6	0.8	0.5	0.8	0.8	0.6	0.8	0.8
126	0.8	0.8	0.6	0.5	0.9	0.8	0.6	0.8	0.5	0.8	0.8	0.5	0.8	0.8
127	0.8	0.8	0.6	0.5	0.9	0.8	0.6	0.8	0.5	0.8	0.8	0.5	0.8	0.8
128	0.8	0.8	0.6	0.5	0.9	0.8	0.6	0.8	0.5	0.8	0.8	0.5	0.8	0.8
129	0.8	0.8	0.6	0.4	0.8	0.8	0.6	0.8	0.5	0.8	0.8	0.5	0.8	0.8
130	0.8	0.8	0.6	0.4	0.8	0.8	0.6	0.8	0.5	0.8	0.8	0.5	0.7	0.8
131	0.8	0.8	0.6	0.4	0.8	0.8	0.6	0.8	0.5	0.8	0.8	0.5	0.7	0.8
132	0.8	0.8	0.6	0.4	0.8	0.8	0.6	0.7	0.5	0.8	0.8	0.5	0.7	0.8
133	0.8	0.8	0.6	0.4	0.8	0.8	0.6	0.7	0.5	0.8	0.7	0.5	0.7	0.8
134	0.8	0.8	0.5	0.4	0.8	0.8	0.6	0.7	0.5	0.8	0.7	0.5	0.7	0.8
135	0.8	0.8	0.5	0.4	0.8	0.8	0.6	0.7	0.5	0.8	0.7	0.5	0.7	0.8
136	0.8	0.8	0.5	0.4	0.8	0.8	0.6	0.7	0.5	0.8	0.7	0.5	0.7	0.8
137	0.8	0.8	0.5	0.4	0.8	0.8	0.6	0.7	0.5	0.8	0.7	0.5	0.7	0.8
138	0.8	0.8	0.5	0.4	0.8	0.8	0.6	0.7	0.5	0.8	0.7	0.5	0.7	0.7
139	0.8	0.8	0.5	0.4	0.8	0.8	0.5	0.7	0.5	0.8	0.7	0.5	0.7	0.7
140	0.8	0.8	0.5	0.4	0.8	0.8	0.5	0.7	0.5	0.8	0.7	0.5	0.7	0.7
141	0.8	0.8	0.5	0.4	0.8	0.8	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
142	0.8	0.8	0.5	0.4	0.8	0.8	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
143	0.8	0.8	0.5	0.4	0.8	0.8	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
144	0.8	0.8	0.5	0.4	0.8	0.8	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
145	0.8	0.8	0.5	0.4	0.8	0.8	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7

Table A–6
Base Line Accountabilty Index Standard Errors of Measurement by School Configuration and School Size (School Size is in terms of average number of student per grade = N)

	School Configuration													
N	K - 5	K - 6	K - 8	K - 12	4 - 5	4 - 6	4 - 8	6 - 8	6 - 12	7 - 8	7 - 9	7 - 12	9 - 12	12 - 12
146	0.8	0.8	0.5	0.4	0.8	0.8	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
147	0.8	0.8	0.5	0.4	0.8	0.8	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
148	0.8	0.8	0.5	0.4	0.8	0.8	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
149	0.8	0.8	0.5	0.4	0.8	0.8	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
150	0.8	0.8	0.5	0.4	0.8	0.8	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
151	0.8	0.8	0.5	0.4	0.8	0.8	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
152	0.8	0.8	0.5	0.4	0.8	0.8	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
153	0.8	0.7	0.5	0.4	0.8	0.8	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
154	0.8	0.7	0.5	0.4	0.8	0.8	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
155	0.7	0.7	0.5	0.4	0.8	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
156	0.7	0.7	0.5	0.4	0.8	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
157	0.7	0.7	0.5	0.4	0.8	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
158	0.7	0.7	0.5	0.4	0.8	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
159	0.7	0.7	0.5	0.4	0.8	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
160	0.7	0.7	0.5	0.4	0.8	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
161	0.7	0.7	0.5	0.4	0.8	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
162	0.7	0.7	0.5	0.4	0.8	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
163	0.7	0.7	0.5	0.4	0.8	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
164	0.7	0.7	0.5	0.4	0.8	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
165	0.7	0.7	0.5	0.4	0.8	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
166	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
167	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
168	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
169	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
170	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
171	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
172	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
173	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
174	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.7	0.7
175	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.6	0.7
176	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.7	0.5	0.7	0.7	0.5	0.6	0.7
177	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.5	0.7	0.6	0.5	0.6	0.7
178	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.5	0.7	0.6	0.5	0.6	0.7
179	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.5	0.7	0.6	0.5	0.6	0.7
180	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.5	0.7	0.6	0.5	0.6	0.7
181	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.5	0.7	0.6	0.5	0.6	0.7
182	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.5	0.7	0.6	0.5	0.6	0.7
183	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.5	0.7	0.6	0.5	0.6	0.7
184	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.4	0.7	0.6	0.5	0.6	0.7
185	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.4	0.7	0.6	0.5	0.6	0.7
186	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.4	0.7	0.6	0.5	0.6	0.6
187	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.4	0.7	0.6	0.5	0.6	0.6
188	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.5	0.6	0.6
189	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.5	0.6	0.6
190	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
191	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6

Table A–6
Base Line Accountabilty Index Standard Errors of Measurement by School Configuration and School Size (School Size is in terms of average number of student per grade = N)

	School Configuration													
N	K - 5	K - 6	K - 8	K - 12	4 - 5	4 - 6	4 - 8	6 - 8	6 - 12	7 - 8	7 - 9	7 - 12	9 - 12	12 - 12
192	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
193	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
194	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
195	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
196	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
197	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
198	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
199	0.7	0.7	0.5	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
200	0.7	0.7	0.4	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
201	0.7	0.7	0.4	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
202	0.7	0.7	0.4	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
203	0.7	0.6	0.4	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
204	0.7	0.6	0.4	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
205	0.7	0.6	0.4	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
206	0.6	0.6	0.4	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
207	0.6	0.6	0.4	0.4	0.7	0.6	0.5	0.6	0.4	0.6	0.6	0.4	0.6	0.6
208	0.6	0.6	0.4	0.4	0.7	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
209	0.6	0.6	0.4	0.4	0.7	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
210	0.6	0.6	0.4	0.4	0.7	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
211	0.6	0.6	0.4	0.4	0.7	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
212	0.6	0.6	0.4	0.4	0.7	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
213	0.6	0.6	0.4	0.4	0.7	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
214	0.6	0.6	0.4	0.3	0.7	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
215	0.6	0.6	0.4	0.3	0.7	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
216	0.6	0.6	0.4	0.3	0.7	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
217	0.6	0.6	0.4	0.3	0.7	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
218	0.6	0.6	0.4	0.3	0.7	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
219	0.6	0.6	0.4	0.3	0.7	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
220	0.6	0.6	0.4	0.3	0.7	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
221	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
222	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
223	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
224	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
225	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
226	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
227	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
228	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
229	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
230	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
231	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
232	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
233	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
234	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
235	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
236	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
237	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6

Table A–6
Base Line Accountabilty Index Standard Errors of Measurement by School Configuration and School Size (School Size is in terms of average number of student per grade = N)

	School Configuration													
N	K - 5	K - 6	K - 8	K - 12	4 - 5	4 - 6	4 - 8	6 - 8	6 - 12	7 - 8	7 - 9	7 - 12	9 - 12	12 - 12
238	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
239	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
240	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
241	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
242	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
243	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
244	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
245	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
246	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.6
247	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.6	0.4	0.5	0.6
248	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.4	0.5	0.6
249	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.4	0.5	0.6
250	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.4	0.5	0.6
251	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.4	0.5	0.6
252	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.4	0.5	0.6
253	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.4	0.5	0.6
254	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.4	0.5	0.6
255	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.4	0.5	0.6
256	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.4	0.5	0.6
257	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.4	0.5	0.6
258	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.4	0.5	0.6
259	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.4	0.5	0.6
260	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.4	0.5	0.6
261	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.4	0.5	0.6
262	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.4	0.5	0.6
263	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.4	0.5	0.5
264	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
265	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
266	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
267	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
268	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
269	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
270	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
271	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
272	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
273	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
274	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
275	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
276	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
277	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
278	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
279	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
280	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
281	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
282	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
283	0.6	0.6	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5

Table A–6
Base Line Accountabilty Index Standard Errors of Measurement by School Configuration and School Size (School Size is in terms of average number of student per grade = N)

	School Configuration													
N	K - 5	K - 6	K - 8	K - 12	4 - 5	4 - 6	4 - 8	6 - 8	6 - 12	7 - 8	7 - 9	7 - 12	9 - 12	12 - 12
284	0.6	0.5	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
285	0.6	0.5	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
286	0.6	0.5	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
287	0.6	0.5	0.4	0.3	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
288	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
289	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
290	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
291	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
292	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
293	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
294	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
295	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
296	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
297	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
298	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
299	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
300	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
301	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
302	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
303	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
304	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
305	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
306	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
307	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.5
308	0.5	0.5	0.4	0.3	0.6	0.5	0.4	0.5	0.3	0.5	0.5	0.4	0.5	0.5
309	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.4	0.5	0.5
310	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.4	0.5	0.5
311	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.4	0.5	0.5
312	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.4	0.5	0.5
313	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.4	0.5	0.5
314	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.4	0.5	0.5
315	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.4	0.5	0.5
316	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.4	0.5	0.5
317	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.4	0.5	0.5
318	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.4	0.5	0.5
319	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
320	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
321	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
322	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
323	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
324	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
325	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
326	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
327	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
328	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
329	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5

Table A–6
Base Line Accountabilty Index Standard Errors of Measurement by School Configuration and School Size (School Size is in terms of average number of student per grade = N)

	School Configuration													
N	K - 5	K - 6	K - 8	K - 12	4 - 5	4 - 6	4 - 8	6 - 8	6 - 12	7 - 8	7 - 9	7 - 12	9 - 12	12 - 12
330	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
331	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
332	0.5	0.5	0.3	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
333	0.5	0.5	0.3	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
334	0.5	0.5	0.3	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
335	0.5	0.5	0.3	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
336	0.5	0.5	0.3	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
337	0.5	0.5	0.3	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
338	0.5	0.5	0.3	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
339	0.5	0.5	0.3	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
340	0.5	0.5	0.3	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
341	0.5	0.5	0.3	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
342	0.5	0.5	0.3	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
343	0.5	0.5	0.3	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
344	0.5	0.5	0.3	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.3	0.5	0.5
345	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
346	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
347	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
348	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
349	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
350	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
351	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
352	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
353	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
354	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
355	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
356	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
357	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
358	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
359	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
360	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
361	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
362	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
363	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
364	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
365	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
366	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
367	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
368	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
369	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
370	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
371	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
372	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5	0.5
373	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.5	0.3	0.5	0.5
374	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.5	0.5
375	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.5	0.5

Table A–6
Base Line Accountabilty Index Standard Errors of Measurement by School Configuration and School Size (School Size is in terms of average number of student per grade = N)

	School Configuration													
N	K - 5	K - 6	K - 8	K - 12	4 - 5	4 - 6	4 - 8	6 - 8	6 - 12	7 - 8	7 - 9	7 - 12	9 - 12	12 - 12
376	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.5	0.5
377	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.5	0.5
378	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.5	0.5
379	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.5	0.5
380	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.5	0.5
381	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
382	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
383	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
384	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
385	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
386	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
387	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
388	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
389	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
390	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
391	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
392	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
393	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
394	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
395	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
396	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
397	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.5	0.4	0.3	0.4	0.5
398	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.5
399	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.5
400	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.5
401	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.5
402	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.5
403	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.5
404	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.5
405	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.5
406	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
407	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
408	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
409	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
410	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
411	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
412	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
413	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
414	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
415	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
416	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
417	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
418	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
419	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
420	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
421	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4

Table A–6
Base Line Accountabilty Index Standard Errors of Measurement by School Configuration and School Size (School Size is in terms of average number of student per grade = N)

	School Configuration													
N	K - 5	K - 6	K - 8	K - 12	4 - 5	4 - 6	4 - 8	6 - 8	6 - 12	7 - 8	7 - 9	7 - 12	9 - 12	12 - 12
422	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
423	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
424	0.5	0.4	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
425	0.5	0.4	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
426	0.5	0.4	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
427	0.5	0.4	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
428	0.5	0.4	0.3	0.2	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
429	0.5	0.4	0.3	0.2	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
430	0.5	0.4	0.3	0.2	0.5	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
431	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
432	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
433	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
434	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
435	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
436	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
437	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
438	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
439	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
440	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
441	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
442	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
443	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
444	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
445	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
446	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
447	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
448	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
449	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
450	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
451	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
452	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
453	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
454	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
455	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
456	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
457	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
458	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
459	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
460	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
461	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
462	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
463	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
464	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
465	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
466	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
467	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4

Table A–6
Base Line Accountabilty Index Standard Errors of Measurement by School Configuration and School Size (School Size is in terms of average number of student per grade = N)

	School Configuration													
N	K - 5	K - 6	K - 8	K - 12	4 - 5	4 - 6	4 - 8	6 - 8	6 - 12	7 - 8	7 - 9	7 - 12	9 - 12	12 - 12
468	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
469	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
470	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
471	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
472	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
473	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
474	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
475	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
476	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
477	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
478	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
479	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
480	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
481	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
482	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
483	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
484	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
485	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
486	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
487	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
488	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
489	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
490	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
491	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
492	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
493	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
494	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
495	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
496	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
497	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
498	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
499	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4
500	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4